

What Is Claimed Is:

1. An apparatus for calculating audience rating using an interactive television,
the apparatus comprising:

a content provider equipped with an audience rating analyzer for transferring all
5 kinds of contents including broadcasting programs, for analyzing a user record
information transmitted from a receiver, and for calculating audience rating per section
of a designated content; and

an interactive television equipped with a controller for providing all kinds of
contents provided by the content provider to a user, and for controlling interactive data
10 transfer and audience rating calculation; a user history recorder for saving information
on the user's action on a corresponding content under the control of the controller and
information on the corresponding content in the form of user record information,
wherein all the user record information saved in the user history recorder is transferred
to the content provider every designated cycle.

2. The apparatus of claim 1, wherein the audience rating analyzer in the
content provider is equipped with analytical tables for saving section information of a
designated content per user, and in order to calculate the audience rating on every
section of the content, the audience rating analyzer detects a section of the content
20 where an action by the user is made when the user record information is transferred
from the interactive television, and increases a frequency of the section among others in
the analytical table.

3. The apparatus of claim 1, wherein the user history recorder is a portable
25 recorder like a smart card.

4. The apparatus of claim 1, wherein the user history recorder is installed in the interactive television.

5. The apparatus of claim 1, wherein the user history recorder further comprises a consumption type recorder for saving information on how a user consumes a content, and a consumption behavior recorder for recording the consumption behavior of each section according to the user's action on each section while using a content.

6. The apparatus of claim 1, wherein the consumption type recorder comprises:

a simple view record area for recording relevant information and frequency thereof, in case a user views a content one time;

a recording record area for recording relevant information and frequency thereof, in case the user records the content wishing to view the content again;

a back-up saving record area for recording relevant information and frequency thereof, in case the content is saved in an external storage besides a receiver; and

at least one of transfer record areas for recording relevant information and frequency, in case the content is transferred to outside through network;

7. The apparatus of claim 6, further comprising a storage record area for storing a content identifier to identify a relevant content.

8. The apparatus of claim 5, wherein the consumption behavior recorder comprises:

a normal finish record area for recording whether the user has view a content to

the end at a normal speed;

a skimmed record area for recording a section information on relevant action, in case the skimmed action is made on the content;

5 a skipped record area for recording a section information on relevant action, in case the skipped action is made on the content;

a replay record area for recording a section information on relevant action, in case the rewind action is made on the content;

a slowed record area for recording a section information on relevant action, in case the slowed action is made on the content; and

10 at least one of stopped record areas for recording a section information on relevant action, in case the stopped action is made on the content.

9. The apparatus of claim 8, wherein, if the user views again the designated content he or she stopped viewing before, all previous stopped record information is
15 deleted, and a latest stopped point information is again recorded in the stopped record area.

10. The apparatus of claim 9, wherein, if the user replays the designated content at an ending part of the designated content, the action is recorded in the normal
20 finish record area.

11. The apparatus of claim 8, wherein the information recorded in the skimmed record area and the skipped record area is designated as record information with low attractiveness to a section of the designated content, while the information
25 recorded in the replay record area and the slowed record area is designated as record

information with high attractiveness to a section of the designated content.

12. The apparatus of claim 8, further comprising a storage record area for storing a content identifier to identify a relevant content.

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13. The apparatus of claim 1, wherein, user record information recorded in the user history recorder is transferred to the content provider if the content provider request the user record information.

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14. A method for calculating audience rating using an interactive television, wherein the interactive television receives all kinds of contents including broadcasting programs from a content provider, provides the contents to a user, saves the user's action information on a designated content in a user history recorder, and if necessary, transfers the user record information saved to the content provider, the method comprising:

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(a) a first operating step of the interactive television that provides a user with all kinds of contents transferred from a content provider like a broadcasting company;

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(b) a second operating step of the interactive television that stores consumption behavior record information including information on a user's action on a specific content and information on a relevant content in a user history recorder;

(c) a third operating step of the interactive television that transfers the consumption behavior record information stored in the user history recorder to the content provider every designated cycle; and

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(d) an operating step of a specific content provider that analyzes the consumption behavior record information transferred from the interactive television,

and calculates audience rating per section of a designated content.

15 15. The method of claim 14, wherein the step (d) is characterized of
calculating the audience rating per section of the relevant content as the frequency of the
5 action made in the relevant content increases.

16. The method of claim 14, wherein the step (d) further comprises the steps
of:

designating a first consumption behavior record information among other
10 consumption behavior record information currently being transferred from the
interactive television as an object consumption behavior record information, and
designating a first consumption behavior out of the designated object consumption
behavior record information as a new action;

detecting a content ID and a section of the content where the new action is
15 generated, and increasing a frequency of the action of the detected section;

repeating a procedure of designating the consumption behavior of the
corresponding action as a new action if a next action exists in the object consumption
behavior record information, a procedure of detecting a content ID and a section of the
content where the new action is generated, and a procedure of increasing a frequency of
20 an action on the detected section until a next action does not exist any more in the object
consumption behavior record information; and

analyzing the entire content and attractiveness per section according to a user
who is recorded in the object consumption behavior record information.

25 17. The method of claim 16, further comprising the steps of:

deciding a presence of a next consumption behavior record information among other consumption behavior record information transferred, given that a next action does not exist in the object consumption behavior record information;

repeating a procedure of designating relevant consumption behavior record information as an object consumption behavior record information, and a procedure of increasing a frequency of a relevant action by finding a section on which the action is made until a next action does not exist any more in the designed object consumption behavior record information, given that the next consumption behavior record information exists;

repeating the previous steps until a next consumption behavior record information does not exist among other transferred consumption behavior record information; and

analyzing audience rating, if the next consumption behavior record information does not exist, based on one of relevant content unit, time unit or section unit by using information on the content and information on frequency of an action on a certain section of the content.

18. The method of claim 17, wherein the consumption behavior information includes the user's age, address and sex, and the audience rating on the relevant content can be calculated being categorized into age, area and sex, respectively.

19. The method of claim 17, wherein the consumption behavior information includes the user's age, address and sex, and the audience rating on each section of the relevant content can be calculated being categorized into age, area and sex, respectively.